

Test Report

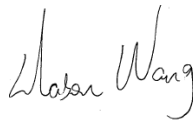
Report Number:150715001SHF-BP-1R1

Applicant Name: XUANCHENG FUMEIDA NEW MATERIALS CO., LTD
Original Report Date: September 7, 2015
Revised Issue Date: September 28, 2015**Applicant Address: No. 16 Dongshan Road, North District Industrial Park, Xuancheng, Anhui****Attn: Qingfan He****Sample Description:**Product: WPC Decking
Model: FS DEK 004
Samples Quantity: 20 pieces
Sample ID: S150715001SHF-001~076
Date Received: 2015-07-03
Date Test Conducted: 2015-07-15~2015-09-07**Tests Conducted:**

Test Methods: Please see the next page(s).

Conclusion:For details refer to attached page(s). Supersede Report No. 150715001SHF-BP-1 (delete test item of resistance against discolouring micro-fungi)
The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

Should you have any queries about the test report, please contact:

Approved by:**Checked by:****Prepared by:**Sun Sun
Assistant ManagerDaniel Zhang
Senior Project EngineerMason Wang
Project Engineer

Test Items, Method and Results:

Test Items	Test Method	Test Results	Test requirements	Verdict
Appearance	EN 15534-1 6.1	No visible colour difference compared to the control sample, no crack, blister and some other visible defects	/	/
Linear mass	EN 15534-1 6.5	Mean value: 2632 g/m Min. value: 2630 g/m	No declared value The relevant value and tolerances shall be declared by the manufacturer.	/
Thickness, width and length	EN 15534-1 6.6.2	Thickness: 25.40 mm Width: 145.35 mm Length: random	No declared value The relevant value and tolerances shall be declared by the manufacturer.	/
Deviation from straightness	EN 15534-1 6.6.3	Max value: 0.5 mm	No declared value The relevant value and tolerances shall be declared by the manufacturer.	/
Cupping	EN 15534-1 6.6.4	Max value: 0.2 mm	No declared value The relevant value and tolerances shall be declared by the manufacturer.	/
Slipperiness	EN 15534-1 6.4.2	Longitudinal: 75 Horizontal: 86	Pendulum value ≥ 36	Pass
Falling mass impact resistance	EN 15534-1 7.1.2.1	No surface crack Residual indentation Maximum value: 0.48	Hollow profiles None of 10 test specimens shall show a failure with a crack length ≥ 10 mm or a depth of residual indentation ≥ 0.5 mm.	Pass

Test Items	Test Method	Test Results	Test requirements	Verdict
Flexural properties ¹	EN 15534-1 Annex A EN 15534-4 Table 3	Mean value of maximum load: 3918 N Minimum value of maximum load: 3898 N Deflection at 500 N Mean value: 1.0 mm Maximum value: 1.0 mm	Flexural properties - F'max \geq 3300 N (arithmetic mean value) - F'max \geq 3000 N (individual values) - Deflection under a load of 500 N \leq 2.0 mm (arithmetic mean value) - Deflection under a load of 500 N \leq 2.5 mm (individual values)	Pass
Resistance to artificial weathering	EN 15534-1 8.1 300h EN ISO 4892-2	Value Range: $\Delta L^* = -1.54 \sim -1.74$ $\Delta a^* = -0.04 \sim 0.02$ $\Delta b^* = -0.83 \sim -0.71$ Grey scale 4	No declared value The relevant value and tolerances shall be declared by the manufacturer.	/
Boiling test	EN 15534-1 8.3.3	Water absorption Mean value: 2.2% Max. value: 2.2%	Mean value of water absorption \leq 7 % in weight Individual values of water absorption \leq 9 % in weight	Pass
Linear thermal expansion coefficient ² (-20°C~80°C)	EN 15534-1 9.2	Mean value: $45.0 \times 10^{-6} \text{ K}^{-1}$	$\leq 50 \cdot 10^{-6} \text{ K}^{-1}$	Pass
Heat reversion	EN 15534-1 9.3	Mean value: -0.03%	/	/
Creep behaviour ¹	EN 15534-1 7.4.1	Mean value: $\Delta S = 1.53 \text{ mm}$ $\Delta S_r = 1.11 \text{ mm}$ Max value: $\Delta S = 1.86 \text{ mm}$	Known span in use $\Delta S \leq 10 \text{ mm}$ for arithmetic mean value $\Delta S \leq 13 \text{ mm}$ for individual values $\Delta S_r \leq 5 \text{ mm}$ for arithmetic mean value	Pass
Moisture resistance under cyclic test conditions ¹	EN 15534-1 8.3.2 and 7.3.2	Original value: 18.4 MPa After moisture condition: 15.3 MPa Mean decrease: 17% Max. individual decrease: 19%	- Mean of decrease of bending strength \leq 20 % - Individual decrease of bending strength \leq 30 %	Pass

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Swelling and water absorption(28 days immersion)	EN 15534-1 8.3.1	Means swelling 1.37% in thickness 0.21% in width 0.29% in length Max. value 1.61% in thickness 0.24% in width 0.35% in length Water absorption Mean value: 5.3% Max. value: 5.6%	1) Means swelling ≤ 0,8 % in width ≤ 4 % in thickness ≤ 0,4 % in length 2) Individual swelling ≤ 5 % in thickness ≤ 1,2 % in width ≤ 0,6 % in length 3) Mean water absorption ≤ 7 % in weight 4) Individual water Absorption ≤ 9 % in weight	Pass
Heat build-up	EN 15534-1 9.4	Mean value: 52.0°C	/	/
Resistance to indentation	EN 15534-1 7.5	Brinell hardness: 121 MPa Rate of elastic recovery: 44%	/	/

Note:

1. The test span was 350 mm offered by applicant
2. This test was conducted at the external approved facility, located at Shanghai.

Appendix A: Sample photos



Fig.1 Sample as received

ORIGINAL

Appendix B: Test photos

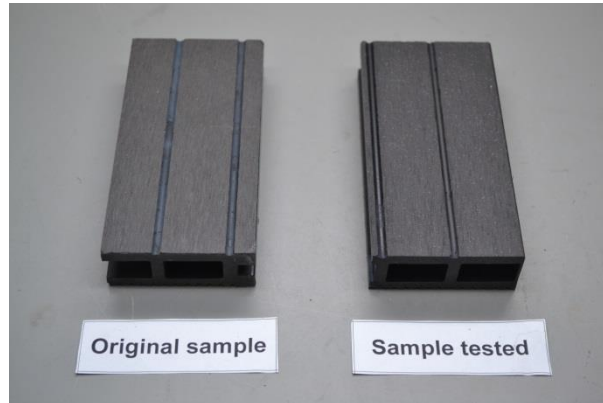


Fig.2 Resistance to artificial weathering

The End of Report

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